The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A ceramic structure comprising a first phase $Cs_2O \cdot Al_2O_3 \cdot 4SiO_2$ (CAS_4), ~~and~~ a second phase $Cs_2O \cdot Al_2O_3 \cdot 2SiO_2$ (CAS_2), and a third phase selected from the group consisting of $SrO \cdot Al_2O_3 \cdot 2SiO_2$ (SAS_2), $SrO \cdot SiO_2$ ($SrSiO_3$) and combinations thereof, wherein the ceramic ~~and having~~has a high thermal expansion anisotropy of between 1400-1450 ppm, as calculated from dimensional change $\Delta L/L_o$ over a temperature range from room temperature to 1000°C, and an average coefficient of thermal expansion from room temperature to 1000°C of -10×10^{-7}/°C to $+25 \times 10^{-7}$/°C.

2. (original) The ceramic structure of claim 1 wherein the average coefficient of thermal expansion from room temperature to 1000°C is about -5×10^{-7}/°C to $+15 \times 10^{-7}$/°C.

3-6 (cancelled)

7. (original) A diesel particulate filter comprising a diphasic highly refractory ceramic having a first phase $Cs_2O \cdot Al_2O_3 \cdot 4SiO_2$ (CAS_4) and a second phase $Cs_2O \cdot Al_2O_3 \cdot 2SiO_2$ (CAS_2) wherein the ceramic has a high thermal expansion anisotropy from room temperature to 1000 °C, an average coefficient of thermal expansion from room temperature to 1000°C of -10×10^{-7}/°C to $+25 \times 10^{-7}$/°C, and a CAS_4-CAS_2 I-ratio, defined as the ratio the intensity of the major peak of the CAS_4 phase at approximately 3.42 Å to the intensity of the major peak of the CAS_2 at 3.24 Å, of 0.25 to 3.0, wherein the diesel particulate filter comprises a honeycomb body, the honeycomb having an inlet end and an outlet end and a multiplicity of cells extending from the inlet end to the outlet end, the cells having porous walls, wherein part of the total number of cells at the inlet end are plugged along a portion of their lengths, and the remaining part of cells that are open at the inlet end are plugged at the outlet end along a portion of their lengths, so that an engine exhaust stream passing through the cells of

the honeycomb from the inlet end to the outlet end flows into the open cells, through the cell walls, and out of the structure through the open cells at the outlet end.

8. (original) The diesel particulate filter of claim 7 wherein the CAS_4-CAS_2 I-ratio is 0.5 to 2.0.

9. (original) The diesel particulate filter of claim 8 wherein the CAS_4-CAS_2 I-ratio is 1.0.

10. (original) The diesel particulate filter of claim 7 wherein the average coefficient of thermal expansion from room temperature to 1000°C of -5 x 10^{-7}/°C to +15 x 10^{-7}/°C.

11. (original) A diesel particulate filter comprising a highly refractory ceramic having a first phase $Cs_2O \cdot Al_2O_3 \cdot 4SiO_2$ (CAS_4), a second phase $Cs_2O \cdot Al_2O_3 \cdot 2SiO_2$ (CAS_2), and a third phase third phase selected from the group consisting of $SrO \cdot Al_2O_3 \cdot 2SiO_2$ (SAS_2), $SrO \cdot SiO_2$ ($SrSiO_3$) and combinations thereof, wherein the ceramic has a high thermal expansion anisotropy from room temperature to 1000 °C and an average coefficient of thermal expansion from room temperature to 1000°C of -10 x 10^{-7}/°C to +25 x 10^{-7}/°C, wherein the diesel particulate filter comprises a honeycomb body, the honeycomb having an inlet end and an outlet end and a multiplicity of cells extending from the inlet end to the outlet end, the cells having porous walls, wherein part of the total number of cells at the inlet end are plugged along a portion of their lengths, and the remaining part of cells that are open at the inlet end are plugged at the outlet end along a portion of their lengths, so that an engine exhaust stream passing through the cells of the honeycomb from the inlet end to the outlet end flows into the open cells, through the cell walls, and out of the structure through the open cells at the outlet end.

12. (original) The diesel particulate filter of claim 11 wherein the average coefficient of thermal expansion from room temperature to 1000°C of -5 x 10^{-7}/°C to +15 x 10^{-7}/°C.

13. (currently amended) A method of producing a formable mixture, the method comprising combining a dry blend material consisting essentially of 70-90 %, by weight, of a glass frit, consisting essentially, expressed in weight percent on an oxide basis, of 60-68 % Cs_2O, 29-35

% SiO_2, and optionally 3-5 % Al_2O_3, and 10-30 %, by weight, Al_2O_3, a solvent selected from the group consisting of deionized water, an emulsion ~~consists~~ consisting essentially of, about 95 % , by weight, deionized water, about 0.7 %, by weight, triethanolamine and about 4.3 %, by weight, oleic acid, and combinations thereof, and a polymer selected from the group consisting of a crosslinked polyacrylic acid copolymer, a polyethylene oxide polymer, and combinations thereof.

14. (original) The method of claim 13 wherein the polymer is a crosslinked polyacrylic acid copolymer.

15. (original) The method of claim 13 wherein the glass frit consists essentially, expressed in weight percent on an oxide basis, of 60-68% Cs_2O, 29-35% SiO_2, and optionally 3-5% Al_2O_3.

16. (original) The method of claim 13 wherein up to 2 %, by weight, Li_2O is substituted for Cs_2O.

17. (original) The method of claim 13 wherein up to 30 %, by weight, SrO, is substituted for Cs_2O.

18. (original) The method of claim 17 wherein the polymer is an aqueous-based cellulose ether polymer.

19. (original) The method of claim 18 wherein the aqueous-based cellulose ether polymer is selected from the group consisting of methylcellulose or hydroxylpropyl methylcellulose.

20. (currently amended) The method of claim 19 wherein the solvent is an emulsion ~~consists~~ consisting essentially of, about 95 %, by weight, deionized water, about 0.7 %, by weight, triethanolamine and about 4.3% by weight, oleic acid, and the polymer is methylcellulose.

21. (original) The method of claim 13 comprising the additional step of shaping the mixture by extrusion into a monolithic structure.

22. (original) The method of claim 21 wherein the mixture is shaped by extrusion.

23. (original) The method of claim 22 wherein the mixture is extruded into a honeycomb.

24. (currently amended) A method of making a monolithic structure for high temperature filtration applications, the method comprising:

a) forming a mixture comprising:

i) about 50-85%, by weight, dry blend consisting essentially of:

1) 70-90%, by weight, of a glass frit consisting essentially, expressed in weight percent on an oxide basis, of 60-68% Cs_2O, 29-35% SiO_2, and optionally 3-5% Al_2O_3; and,

2) 10-30 %, by weight, Al_2O_3; and,

ii) 15-30 %, by weight, of a solvent selected from the group consisting of deionized water, an emulsion ~~consists~~ consisting essentially of, about 95 %, by weight, deionized water, about 0.7 %, by weight, triethanolamine and about 4.3% by weight, oleic acid, and combinations thereof;

iii) 0.1-8%, by weight, of a polymer selected from the group consisting of a crosslinked polyacrylic acid copolymer, a polyethylene oxide polymer, and combinations thereof; and,

iv) 0-25%, by weight, of a pore former;

b) shaping the mixture to form a green body; and,

c) firing the green honeycomb structure in an electric furnace at a temperature of about 1350 to 1550°C over a period of about 6 to 12 hours, and held at a maximum temperature for about 4 to 12 hours.

25. (original) The method of claim 24 wherein dry blend consists essentially of about 85%, by weight, glass frit and about 15%, by weight, alumina.

26. (original) The method of claim 24 wherein up to 2 %, by weight, Li_2O is substituted for Cs_2O.

27. (original) The method of claim 26 wherein the polymer is added at 0.1-4%, by weight.

28. (original) The method of claim 27 wherein the polymer is crosslinked polyacrylic acid copolymer.

29. (original) The method of claim 24 wherein up to 30 %, by weight, SrO, is substituted for Cs_2O.

30. (cancelled)

31. (original) The method of claim 30 wherein the aqueous-based cellulose ether polymer is selected from the group consisting of methylcellulose or hydroxylpropyl methylcellulose.

32. (currently amended) The method of claim 31 wherein the solvent is an emulsion ~~consists~~ consisting essentially of, about 95 %, by weight, deionized water, about 0.7 %, by weight, triethanolamine and about 4.3% by weight, oleic acid, and the polymer is methylcellulose.

33. (original) The method of claim 24 wherein the pore former is graphite.

34. (original) The method of claim 24 wherein the mixture is shaped by extrusion into a honeycomb structure having an inlet end and an outlet end and a multiplicity of cells extending from the inlet end to the outlet end, the cells having porous walls.

35. (original) The method of claim 34 wherein every other cell is plugged to form a wall-flow filter.